

(19) World Intellectual Property Organization  
International Bureau



Rec'd

05 OCT 2004

(43) International Publication Date  
23 October 2003 (23.10.2003)

PCT

(10) International Publication Number  
**WO 03/087148 A2**

- (51) International Patent Classification<sup>7</sup>: **C07K 14/32**
- (21) International Application Number: **PCT/DK03/00200**
- (22) International Filing Date: **25 March 2003 (25.03.2003)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:  
**PA 2002 00533 10 April 2002 (10.04.2002) DK**
- (71) Applicant (for all designated States except US):  
**NOVOZYMES A/S [DK/DK]; Krogshøjvej 36, DK-2880 Bagsværd (DK).**
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **ANDERSEN, Jens, Tønne [DK/DK]; Alfred Christensens Vej 35, DK-2850 Nærum (DK). JØRGENSEN, Steen, Troels [DK/DK]; Prunusvej 5, DK-3450 Allerød (DK). RASMUSSEN, Michael, Dolbjerg [DK/DK]; Syvbjergvej 151, DK-2625 Vallensbæk (DK). OLSEN, Peter, Bjarke [DK/DK]; Svendborggade 8, 4 tv, DK-2100 Copenhagen Ø (DK). CLAUSEN, Ib, Groth [DK/DK]; Fyrrestien 6, DK-3400 Hillerød (DK).**
- (74) Common Representative: **NOVOZYMES A/S; Krogshøjvej 36, DK-2880 Bagsværd (DK).**
- (81) Designated States (national): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**
- (84) Designated States (regional): **ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).**
- Published:**  
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: **IMPROVED BACILLUS HOST CELL**

(57) Abstract: *A Bacillus licheniformis* mutant host cell derived from a parent *B. licheniformis* host cell, which mutant host cell is mutated in one or more gene(s) encoding one or more polypeptide(s) involved in sporulation which is at least 80% identical to one or more of the polypeptides shown in SEQ ID NO's: 2 to 191, wherein the mutant host cell expresses at least 5% less of the one or more polypeptide(s) involved in sporulation than the parent host cell, when they are cultivated under comparable conditions

WO 03/087148 A2